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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,453	07/21/2003	Soo Won Park	9988.039.00-US	5244

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EXAMINER

GRAVINI, STEPHEN MICHAEL

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 08/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,453

Applicant(s)

PARK, SOO WON

Examiner

Stephen Gravini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

Claims 17-23 are objected to because those claims recite a preamble of an automatic dryer but do not depend upon a claim which recites an automatic dryer. It is assumed that the applicant intended dependency upon claim 13, but examination will be based upon their dependency upon claim 1 either directly or indirectly. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-12 and 17-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 11-12 and 22-23 recite the feature of being slopped away. That feature is interpreted to include a fluid flowing such that it carries away an article. It is considered indefinite for a sensor to be slopped away from a surface, since fluid is not expressly or implicitly claimed for that feature. Also claims 17-23 are considered indefinite because those claims recite a preamble of an automatic dryer but do not depend upon a claim which recites an automatic dryer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-13, and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 6,141,887) in view of Deschaaf et al. (US 4,385,452). Chen is considered to disclose the claimed invention comprising:

a cabinet **10**;

a drum **26** rotatably provided in the cabinet for containing a load of wet clothes to be dried;

a rear bulkhead **34** comprising an air inlet opening that exhausts dry air into the drum;

a front bulkhead **30** comprising an air outlet opening that exhausts humidified air from the drum;

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an electrically non-conductive sensor body **148** secured directly to the front bulkhead, the sensor body being positioned so as to cover a portion of the air outlet opening;

and a perforated air outlet grill **36** being rigidly secured to the front bulkhead and covering the remaining portion of the air outlet opening. Chen is considered to disclose the claimed invention, except for the claimed feature including at least one sensing element disposed on a first surface of the sensor body, the at least one sensing element being exposed to inside of the drum so as to make contact with the wet clothes.

Deschaaf is considered to disclose that feature at column 5 line 61 through column 6 line 18 and as shown in figure **5**. It would have been obvious to one skilled in the art to combine the teachings of Chen with a feature including at least one sensing element disposed on a first surface of the sensor body, the at least one sensing element being exposed to inside of the drum so as to make contact with the wet clothes, considered to be disclosed in secondary reference Deschaaf for the purpose of more accurately sensing the moisture of clothes being dried within a clothes dryer by contacting the clothes instead of sensing the moisture of the air flowing past the clothes. Furthermore Chen in view of Deschaaf is considered to disclose the claimed invention, as discussed above, under the obviousness rejection, except for the claimed screw holes, detent, caved channel, ridge included groove, and sloping surface. It would have been an obvious matter of design choice to provide the claimed fastening means or adjoining surface shapes for the purpose of securing a moisture sensor to a clothes dryer for a more contoured profile.

Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Deschaaf in further view of Jelinek et al. (US 5,940,986). Chen in view of Deschaaf is considered to disclose the claimed invention, as discussed under the obviousness rejection above, except for the claimed sensor body includes an extension member extended from a second surface of the sensor body and a first mounting bracket having an aperture provided thereon is extended from the front bulkhead, the extension member being inserted into the aperture for slip fit engagement with the first mounting bracket. Jelinek is considered to disclose a sensor body includes an extension member extended from a second surface of the sensor body and a first mounting bracket having an aperture provided thereon is extended from the front bulkhead, the extension member being inserted into the aperture for slip fit engagement with the first mounting bracket at column 3 lines 41-58. It would have been an obvious to one skilled in the art to combine the teachings of Chen in view Deschaaf with the considered teachings found in Jelinek for the purpose of fitting a sensor in an engaged position within the structure of a clothes dryer.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References N and O, cited in this action show moistures sensors mounted in clothes drying devices that contact clothing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 703 308

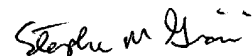
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7570. The examiner can normally be reached on normal weekday business hours (east coast time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira S. Lazarus can be reached on 703 308 1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Smg



August 17, 2004